DR 690-1-900

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT, CORPS OF ENGINEERS
210 TUCKER BLVD., NORTH
ST. LOUIS. MISSOURI 63101

LMSPO-T

25 May 1984

Civilian Personnel
ARMY CIVILIAN CAREER PROGRAM FOR
ENGINEERS AND SCIENTISTS (RESOURCES AND CONSTRUCTION)
ROTATIONAL ENGINEER INTERNS

Supervisors should file this regulation in Section II of the Supervisor's Handbook

- 1. PURPOSE. This implements that portion of ER690-1-958, Army Civilian Career Program for Engineers and Scientists (Resources and Construction), and the Corps-wide training agreement providing for rotational training of engineer interns. This is issued under authority contained in OCE Suppl 1 to AR 310-2.
- 2. APPLICABILITY. This regulation applies to interns recruited for positions in the series listed below at the GS-05 and GS-07 levels and placed in positions for advancement to the GS-7 and GS-09 levels in their respective series with a target position of GS-11:

Civil Engineer	0810
Mechanical Engineer	0830
Electrical Engineer	0850
Landscape Architect	0807
Architect	0808

It is also applicable to supervisors of organizational elements to which these interns are assigned during their training.

3. POLICY. St. Louis District will provide rotational training assignments to engineer interns to which this program applies. The program will provide a variety of meaningful experiences for interns with a view toward enhancing accelerated initial promotion. This is the only training program for engineer interns and they will be recruited only for this program. Upon entering employment, the intern will be assigned to the position for which he/she was recruited and the supervisor will be the designated Trainee Coordinator for the intern. Special consideration will be given to training schedules for those with a physical handicap.

4. RESPONSIBILITIES.

- a. <u>Commander</u>. The Commander will assure that all individuals selected for this program will be afforded the opportunity for accelerated training under this program and will monitor the overall program operation and management to assure that it meets District needs and is consistent with Corps of Engineers policy.
- b. <u>Personnel Office</u>. The Personnel Officer will assure that personnel engaged in recruiting of engineer and scientist interns for this program present the requirements of the program to prospective interns prior to their acceptance for employment. Training and Development Office will provide over-all administration of the program with respect to coordination of training assignments, recordkeeping, intern appraisal, etc. The Recruitment and Placement Branch will determine eligibility requirements for intern promotions.
- c. <u>Career Program Manager</u>. The Career Program Manager for the Engineer and Scientist Career Program will monitor the effectiveness of training assignments, assure that the intent of this developmental program is carried out, and provide advice and counsel to supervisors concerning the nature and appropriateness of the assignments. The Chief, Engineering Division, is the Career Program Manager in the St. Louis District.
- d. <u>Division Chiefs</u>. The chiefs of technical divisions will assure that interns assigned to their organization are provided meaningful developmental assignments in accordance with the intent of this program.
- e. Trainee Coordinator. The intern's supervisor in his/her target organization will be his/her Trainee Coordinator and will serve as counselor and advisor to the intern throughout the training program, including preparing the intern's individual training schedule and conducting an orientation during the first phase of the training program. The Trainee Coordinator will make recommendations to the Career Program Manager and supervisors concerning the appropriateness of training provided the intern, and will counsel the trainee on selecting formal classroom courses. The Trainee Coordinator will recommend promotion of the intern upon determination of eligibility based upon successful completion of the required training or as scheduled. An SF-52, Personnel Action Request, will then be promptly submitted to the Personnel Office. Promotions will not be made retroactively.
- f. <u>Supervisors</u>. Supervisors will provide detailed training so that interns will acquire the skills, knowledge, and abilities outlined in the training plan.
- g. <u>Interns</u>. All interns must sign a Training Agreement. (The Agreement form is in Appendix C.) Interns are expected to complete training

assignments as scheduled and will provide a narrative evaluation of each accomplished assignment relative to the training plan. The evaluation will be submitted through the Career Program Manager to the Training and Development Branch, Personnel Office, within 5 days of completion of each assignment. The intern will provide a copy of the evaluation to both the evaluating supervisor and the Trainee Coordinator.

TRAINING PROGRAM.

- a. Training Plan. The St. Louis District Training Plan objectives, subject matter coverage, and skills, knowledge, and abilities to be acquired are outlined in Appendix A. A training schedule will include assignments in each major division, a construction field office, and a military facility. A training schedule must be carefully prepared to provide adequate time for development of a comprehensive degree of proficiency in those subject matters which best suit the needs of the individual and management, considering the allotted time, the intern's interests and experience, and the anticipated target assignment upon completion of the training program. It should be recognized that length of assignment does not permit adequate time to achieve a comprehensive degree of proficiency in every subject matter included in the training plan.
- b. <u>Training Schedule</u>. Typical training schedules for entry level of GS-05 and GS-07 are in Appendix B. Points in time that interns would normally be eligible for promotion are noted thereon. Specific ; uidelines for schedules are as follows:
- (1) The order of assignments is flexible, subject to several factors that could affect implementation.
- (2) Durations of assignments in each phase of the training schedule should adhere to the times shown on the schedules as much as practical and must not vary more than 25 percent. Variations will depend upon the intern's previous experience, education, and ability to progress. In no instance will the training be less than 30 months for those entering at the GS-05 level, or 18 months for those entering at the GS-07 level.
- (3) The Trainee Coordinator will include orientation as the initial objective in the initial phase of training.
- (4) Orientation visits to offices not shown on the typical schedule and formal classroom training may be arranged during times allotted in the major offices, subject to approval of the Chief of the element to which the intern is assigned at the time and the Chief of the office to be risited. Appropriate time must be allotted for orientation in the Safety Office.

c. <u>Formal Training</u>. The Trainee Coordinator and the intern will select and submit requests for formal training that best suits the needs of the intern and management; safety training is emphasized. Requests must be approved by the Training and Development Branch.

d. Evaluation of Internship.

- (1) Evaluation of the Intern. Instructions for Performance Appraisals for Career Interns (Appendix D) provides instructions for completing performance appraisals. In accordance with these instructions, sample forms have been developed to help meet appraisal requirements (Appendix E).
- (2) Evaluation by the Intern. The Intern will prepare an overall narrative evaluation of his/her training schedule which will describe his/her achievements and the degree to which the program requirements were met. The evaluation will include any suggestion or recommendations as to how the program might be improved. The evaluation will be submitted through the Career Program Manager to the Training and Development Branch, Personnel Office, within 10 days of completion of the training schedule. The Intern will provide a copy of the final evaluation to the Trainee Coordinator.

e. Promotions.

- (1) Interns entering at the GS-05 level will receive training under this program for a minimum period of 30 months. Upon successful completion of the first 6 months of training, the intern will be eligible for promotion to the GS-07 level. The evaluation of the trainee's progress must clearly specify how the training meets the qualifications and time-in-grade requirements for promotion to the next higher grade. The employee will then spend the next 12 months completing training assignments and other such training as considered necessary. Upon successful completion of this 12-month period at the GS-07 level, the employee will be eligible for promotion to the GS-09 level. Successful completion of one additional year of developmental training will qualify the individual for promotion to the GS-11 target position. This last 12 months at the GS-09 level will normally be spent in the functional area to which the employee will be assigned upon completion of the program.
- (2) Interns entering at the GS-07 level will receive training under this program for a minimum period of 18 months. Upon successful completion of the first 6 months of training, the intern will be eligible for promotion to the GS-09 level. Training assignments will continue for the first 6 months of the GS-09 level. Assignment during the last 6 months of the GS-09 level will normally be spent in the functional area (target organization) to which the employee will be assigned upon completion of the program.

Successful completion of the 1 year at the GS-09 level will qualify the individual for promotion to the GS-11 level. As with entry as the GS-05 level, evaluation of the trainee must document that training needs and qualification requirements were met prior to promotion from one level to the next.

f. Record of Training Completion. The Personnel Office will provide a written record of satisfactory completion of training to be made a part of the intern's Official Personnel Folder.

FOR THE COMMANDER:

Executive Assistant

DISTRIBUTION
All Supervisors
LMVAS-R (2)
LMSAS-M (2)
AH
LMSPO-S (10)
LMSPO-T (10)

APPENDIX A

TRAINING PLAN

The Training Plan states the objectives of assignment in each major element of the District along with the subject matter to be covered and the skills, knowledge, and abilities to be acquired. The degree of proficiency which an intern might achieve in any specific subject matter is presented and the intern's experience, education, and ability to progress. It should be recognized that in the time allotted it is not possible for the intern to achieve a comprehensive degree of proficiency in every subject matter included in the training plan.

An orientation will be given the intern as the initial subject matter of his/her initial assignment. The orientation will familiarize the intern with the District functions, goals and objectives, organization structure and other echelons of the Corps. Appropriate time will be spent visiting the various District Office facilities so that the intern may become oriented in his initial physical location.

APPENDIX B

ROTATIONAL TRAINING SCHEDULE FOR ENGINEERING DIVISION ENGINEER INTERNS

Major Phase	Entry Level	GS-05	Entry Level	GS-07
	Time in Phase	Grade Length	Time in Phase	Grade Length
Engineering Division	32 wks.	GS-05 6 Months	20 wks.	GS-07 6 Months
Planning Division	6 wks.	GS-07 12 Months	4 wks.	GS-07 6 Months
.Construction Division	16 wks.	GS-07 12 Months	10 wks.	GS-07 6 Months
Operation Division	4 wks.	GS-07 1: Months	4 wks.	GS-07 6 Months
Facilities Engineer	2 wks.	GS-09 12 Months	2 wks.	GS-09 12 Months
Target Position	70 wks.	GS-09	38 wks.	GS-09
TOTAL	130 Weeks	GS-11	78 Weeks	12 Months GS-11

ENGINEERING DIVISION Design Branch

Objective:

To become familiar with the U.S. Army Corps of Engineers responsibilities and technical assignments in the areas of Architectural, Specifications, Cost Estimating and Electrical, Mechanical, Environmental, Structural and Civil Engineering.

Skills, Knowledge, and Abilities to be Acquired Subject Matter Coverage At the end of this segment the intern will be able to: 1. Preparation of Plans Understand, in general, the basis of design requirements for preparation of plans for civil projects. Develop familiarity with current design techniques, procedures, and practices used in U.S. Army Corps of Engineers. Develop appreciation for team design and the integration of various disciplines contribution into the final product. Preparation of Specifications Mark up guide specifications to conform to design requirements for a particular item of work. Review previous job specifications for applicability to current items of work. Assist in formulating complete specifications for current items of work. Safety Requirements Become knowledgeable of the provision of EM 385-1-1 and its applicability for incorporation into design. River Stabilization Understand, in general, the basis of design for the St. Louis District's river stabilization: program. 5. Computer Utilization Understand, in general, the use of the computer as a tool for design and drawing preparation. Develop appreciation for the need to develop

confidence in theoretical

underpinnings of program utilized.

ENGINEERING DIVISION
Project Management Branch

Objective:

To become familiar with preparation of design memoranda for Civil Works projects and preparation of reports for assigned military master plans.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Water Resources Projects

- a. Understand the general aspects of study management and the type of field investigation and studies needed in preparation of general design memorandums (GDM's) for authorized projects and for project modifications under the discretionary authority of the Chief of Engineers.
- b. Understand the type of engineering, economic and environmental data presented in GDM's for various project purposes such as water supply, navigation and flood control by such means as channel improvements, reservoirs and/or pumping stations.
- c. Understand the responsibilities of the local sponsors and the Corps, as. well as the general responsibilities of other Federal and state agencies relating to Corps work.
- d. Understand the general budgeting process for authorized projects, including justification and programming data.
- 2. Military mobilization master plans as assigned by the District Engineer
- a. Understand the general type of engineering data input for development of mobilization master plans.
- b. Understand the general activities involved in the preparation of installation support books in support of military mobilization.

ENGINEERING DIVISION Hydraulics Branch

Objective:

Familiarize trainee with Branch activities and how they are incorporated into the overall mission for the Division and District.

Subject Matter Coverage	Skills, Knowledge, and Abilities to be Acquired
	At the end of this segment the intern will be able to:
1. Hydraulics Branch Functions	Understand the functions of the Branch and its responsibility to other elements of the Division and District.
2. Hydrologic Studies	Understand the general types of methodology used in developing the required hydrologic data using basi:
en filologist i successi ne interesi de la colo	data and developing the basic rain fall-runoff relation for the watershed in question.
3. Hydraulic Design	Understand the general aspects of the hydraulic design of water control structures such as multipurpose dams, navigation locks and dams etc.
4. Sedimentation Activities	Understand in general the District's sedimentation program including reservoir sedimentation, and Mississippi river and tributary sedimentation.
5. Water Data Activities	Understand the magnitude, scope, and significance of the District's stream flow and water quality programs. Also, to understand the techniques used in obtaining and publishing the required data so other may use it.
6. Water Control Management Activities	Understand the process by which the Districts multi-purpose and navigation projects are regulated to reflect current climatological conditions and project purpose.

ENGINEERING DIVISION Survey Branch

Objective:

To become familiar with the Branch's function within Engineering Division and the District.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Surveying

Understand the principles involved in performing engineering surveys within the District. These include topographical, hydrographic and construction surveys. Understand the relationship between surveying and other elements of the District.

ENGINEERING DIVISION
Foundation & Materials Branch

Objective:

To become familiar with the Branch's function within Engineering Division and the District.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Geologic Investigations

Appreciate the principles involved in the determination of rock properties, subsurface stratigraphy, seismicity, and groundwater, and other the techniques such as rock coring and geophysics used to determine these parameters. Understand how these parameters are used in the design of engineered structures.

2. Geotechnical Design

Appreciate the factors involved in assessment of soil and rock types, strengths and manipulative procedures; in preparation of soil structure interaction parameters; in establishment of economic embankment shape and zonations; and in evaluation of parameters for rock structures, tunnels, etc. Understand the principles involved in the performance of geotechnical design for flood control structures. These include subsurface exploration programs, soils laboratory testing, and geotechnical design principles, including computer application. Understand the relationship between geotechnical engineering and engineering, planning, and construction project elements.

3. Foundation Investigations

Understand the principles of rock coring, undisturbed soil sampling, standard penetration testing, in-situ testing.

Subject Matter Coverage

- 4. Concrete Technology
- Instrumentation, and Evaluation of Completed Works

Skills, Knowledge, and Abilities to be Acquired

Understand the principles of concrete aggregate evaluations, concrete mix design, durability of concrete.

Understand the general program of inspection of completed works within the District, including the responsibilities of the Corps and local sponsors as to the operation and maintenance of the structures.

Understand how instrumentation aids in this program and appreciate basic instrumentation principles.

CONSTRUCTION DIVISION
Contract Management Branch

Objective:

To become familiar with the functions and responsibilities of the Branch.

Subject Matter Coverage	Skills, Knowledge, and Abilities to be Acquired
	At the end of this segment the intern will be able to:
1. Advance Plans and Specifications	Review, with assistance of experienced personnel, simple plans and specs for clarity, completeness and accuracy and prepare draft DF transmitting review comments to responsible District element.
2. Contract Clauses	Understand, in general, the purpose and significance of the most often
	encountered contract clauses, such as Changes, Time Extensions, Differing Site Conditions, Disputes, Suspension, Variations in Estimated Quantities.
3. Correspondence	Understand the necessity for timely correspondence with the Contractor, District elements, and others, and prepare limited draft correspondence with guidance of experienced personnel.
4. Changes, Modifications, Claims	Understand, in general, the procedures for issuance, preparation and resolution of changes, modifications and claims, and provide limited assistance with changes, estimate preparation.
5. Contract Administration	Understand the basic elements of administration of a contract from opening of bids and award through acceptance and turn over to local interest, the need to interface with others, and the necessity for documentation of action.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

6. Authorities, Responsibilitie:

Understand the contract authority of Contracting Officer, Resident Contracting Officer, Contracting Officer Representative and others, and who has responsibility to assure a needed contract action is taken.

7. Resident Office Assistance

Understand the basic functions and responsibilities of Area Office and the relationship with Construction Branch regarding technical assistance and contract administration matters, and participate, with experienced personnel, in field surveillance and final acceptance inspection of projects.

RESIDENT OFFICE

Objective:

To become familiar with procedures of the Resident Office.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

- a. Ability to work with experienced construction inspector or representative performing day-to-day construction contract inspection; maintain contract documentation, ensure contract requirements are met.
- b. Knowledge of shop drawings and contractor submittal to apply engineering training to ensure materials and methods are in accordance with approvals.
- c. Knowledge of safety requirements.
- d. Ability to obtain survey data.
- e. Ability to provide complete construction inspection coverage of small, straight forward contracts.
- f. Ability to provide field surveillance of relocation-type contracts.

CONSTRUCTION DIVISION

Supervision & Inspection Branch

Objective:

To become familiar with procedures of the Branch.

Subject	Matter	Cov	erage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Office Engineering

- a. understand shop drawings and contract submittals.
- b. Prepare and help prepare Government cost estimates for contract modifications.
- c. Understand how to complete contract quantities manually and using computer.
- d. Understand relocation type contracts.
- e. Understand contract records in order to evaluate contractor performance and regarding claims.
- f. Assist in Office Engineering phases of inspection of completed works.
- g. Prepare as-built drawings.

OPERATIONS DIVISION

Natural Resource Management Branch

Objective:

To become familiar with procedures of the Natural Resource Management Branch.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Natural Resource Management

Understand the functions, operation and procedures involved in the administration of lake lands, waters, powerhouses, and related facilities. Become familiar with major activities of the branch; reservoir operation (flood control), recreation, resources management, powerhouse operation and maintenance, outgrant and easement land management, and lakeshore management. Understand the coordination and functions of Master Plans and appendices to the Master Plan. Review the relationship of the branch with other District elements.

OPERATIONS DIVISION

Plant Branch

Objective:

To become familiar with procedures of Plant Branch.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Plant Branch Organization

Understand the function, operation and procedures involved in managing Plant Branch. Become familiar with the Plant Engineering Inspection Section, Electronics Section, Motor Vehicle Section, and Service Base including the elements of safety and security. Understand how the total repair program, additions and betterments and other maintenance and/or modification; to floating, land and mobile plant ar accomplished. Become familiar with the operation of the District radio system and the administration of the motor vehicle management program.

2. Plant Replacement and Improvement Program

Understand the general aspects of Additions and Betterments, acquisitions, conversions, etc., of the PR&IP, the authorities that have to be obtained to do the particular work and the ways and means of accomplishing this work. Learn the working procedures of the Revolving Fund, where the PR&IP is funded.

OPERATIONS DIVISION

Regulatory Functions Branch

Objective:

To become familiar with procedures of Regulatory Functions Branch.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

Regulatory Functions

Understand the current regulations pertaining to Section 10 of the River and Harbor Act of 1899 and Section 404 of the Clean Water Act of 1977; procedures for securing permits for construction and maintenance in wetlands and other waters of the United States; and enforcement procedures under the applicable laws.

OPERATIONS DIVISION

Navigation Branch

Objective:

To become familiar with Lock 7 Dam Operations and Maintenance and dredging operations.

	Subject Matter Coverage	Skills, Knowledge, and Abilities to be Acquired
		At the end of this segment the intern will be able to:
1.	L&D Operations	Understand the operation of locks and dams and maintenance of structure and operating equipment. Understand the function, operation and procedures involved in managing the Lock and Dam Section.
2.	Dredging Operations	Understand the methods and equipment involved in dredging operations, including control of alignment, depth, and cross section of cuts, placing discharge of materials, and capacities of various dredge plants.

OPERATIONS DIVISION

Emergency Operations Branch

Objective:

Familiarize trainee with the U.S. Army Corps of Engineers philosophy, policies and procedures required in performing disaster activities encompassed by the emergency management program.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Natural Emergencies

Understand the Corps' authorized activities such as disaster preparedness, advance measures, flood fighting and rescue work, rehabilitation of flood control works damaged or destroyed by flood, protection or repair of Federally authorized shore protective works threatened or damaged by coastal storm, and provision of emergency drinking water under authority of Flood and Coastal Storm Emergencies (PL 84-99). Obtain a general knowledge of Corps' activities under the Disaster Relief and Assistance Program (PL 93-288), which normally consists of technical advice and construction contracting for the Federal Emergency Management Agency (FEMA). Also includes performing preliminary surveys/estimates of damages, furnishing recommendations and damage survey reports.

2. National Emergencies

Become knowledgeable of the responsibilities and understand the guidelines and procedures to ensure survival of personnel and continued operation of the Memphis District Corps of Engineers during and after a national emergency condition. Understand that the Corps has the responsibility to provide engineering support to the Army for wartime

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

mission, as well as coordination and liaison with Division and cooperation with Federal and state organizations concerning support of Civil Defense activities.

3. Flood Control Structures

Understand the general program of operating and maintaining flood control structures such as levees, floodgates, pumping plants, and improved channels, including the responsibilities of the Corps and local sponsors as required by policy and law.

PLANNING DIVISION

Environmental Analysis Resources Branch

Objective:

To gain a basic knowledge of the environmental planning process, the environmental input required to project formulation, and the procedures for environmental impact assessment and preparation of environmental statements.

Subject Matter Coverage	Skills, Knowledge, and Abilities to be Acquired
	At the end of this segment the intern will be able to:
1. Environmental Plan Formulation	Understand the guidelines and regulations pertaining to plan formulation. Assist in identifying environmental goals for the study area of a specific water resources project.
2. Coordination and Public Contact.	Participate in coordination visits and meetings with other agencies and interests, attend workshop meetings, write coordination letters, and accompany experienced personnel during internal coordination with other sections. Prepare memoranda to files documenting environmental objectives and concerns of other agencies and interests.
3. Environmental Impact Assessment	Research and document environmental elements in study area in own area of expertise. With assistance of experienced personnel, measure the effects of various alternative water-resources development plans on "no action" conditions in the study area. Write draft of portion of environmental assessments and impact statements.
4. Cultural Resources	Have a basic understanding of cultural resources guidelines and regulations. Accompany experienced personnel during internal coordination with other

sections. Prepare memoranda to files

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

documenting cultural resources objectives and concerns of other agencies and interests. If available, participate in coordination visit or meeting with state or Federal agency. With assistance of experienced personnel, research and document cultural resources in study area, measure the effects of various alternatives to the proposed project and associated cultural resources.

5. Recreation and Beautification

Describe types of recreation and beautification applicable to water resources projects, including visitation to existing Corps projects. Describe recreation master plans and design documents. Perform assigned tasks regarding review of plans and specifications, calculation of quantity takeoffs, cost estimating and preparation of management network.

6. Programming and Scheduling

Assist in preparation of task matrices, flow diagrams and cost estimates.

PLANNING DIVISION

Flood Plain Management Branch

Objective:

To become familiar with the objectives of the Federal Flood Plain Management Program: including orientation to planning assistance for communities, the flood insurance program and non-structural measures for flood damage, reduction.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Flood Plain Delineations

Determine assumptions and limitations of such delineations. Respond to requests for flood hazard evaluation, technical hydrologic and hydraulic data, and planning assistance.

2. Flood Plain regulations

Describe Federal and local regulations concerning flood plain. and floodways. Understand Federal concepts of local regulation as illustrated by the flood insurance and planning assistance programs. Assist in producing flood insurance studies, flood damage potential reports, and special flood hazard studies.

3. Non-structural Flood Damage Reduction Measures

Assist in developing non-structural alternatives to flood control projects and, if time permits, provide evaluations of the alternatives.

PLANNING DIVISION

Economic and Social Analysis Branch

Objective:

To become familiar with economic and social evaluation studies. Includes involvement in the plan formulation process for ongoing planning, design and construction programs as applied to flood reduction, navigation, and other related water resource studies.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Discounting

- a. Compute present value of any type time stream of values at any specified point in time.
- b. Convert present values for specified years into equivalent constant time streams over a specified time period.
- c. Become proficient in using computers and calculators to discount, compound and otherwise manipulate both time streams and constant values.
- 2. Basic Economic Relationships
- a. Explain how benefit-cost analysis was derived from social welfare theory.
- b. State and define both verbally and algebraically the primary physical, social and economic relationships used in water resource development benefit-cost analysis.
- c. Describe the primary types of impact generally associated with each different type of flood control construction alternatives used in
- St. Louis District studies (e.g., channel enlargement, reservoirs, levees, etc.).

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

- d. Given estimates of existing hydraulic condition flood damages, describe the procedure used to formulate an optimum improvement plan.
- 3. Basic Estimation Techniques
- a. Describe and use the primary estimation technique used for each benefit category.
- b. Use both manual operations and computer programs to perform numeric integration procedures when estimating expected annual values.
- c. Use ordinary least squares regression techniques to estimate bivariate relationships.
- a. Describe and use current sources of data for establishing socio-economic characteristics of study areas.
- b. Recognize the importance of social impacts such as safety, people displacement, community cohesion, esthetics, income redistribution, etc.
- a. Cite the regulations when applicable that pertain to the format and content of the economic sections and appendixes of District reports.
- b. Develop a written and graphic presentation of methodology used during an analysis and the results, thereof.

4. Social Data

Report Preparation

5.

1 371

PLANNING DIVISION

Plan Formulation Branch

Objective:

To become familiar with the Corps of Engineers' plan formulation process for general investigations, reevaluation studies, continuing authority studies, and assigned military investigation.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

1. Plan Formulation

- a. Understand the general aspacets of study management and the effort needed to prepare reports.
- b. Understand the type of engineering, economic and environmental data presented in reports.

2. Public Participation

Understand the requirements of public participation programs and the developing of a program.

PLANNING DIVISION

Master Planning Branch

Objective:

To become familiar with the Corps of Engineers' planning process involving the investigation, planning, and development of recreation resources at water resource projects.

Subject Matter Coverage

Skills, Knowledge, and Abilities to be Acquired

At the end of this segment the intern will be able to:

- 1. Project Master Plan Formulation
- a. Understand the general aspacets of recreation resources planning, progressing from the pre-authorization investigation stage, through Phases I and II General Design, to the detailed preparation of a Master Plan.
- 2. Coordination Requirements

Understand that recreation development and land allocation planning and zoning is accomplished as an integral part of an overall plan that is coordinated with other Federal, state, and local public agencies in regard to their recreational development in the region.

3. Reevaluation and Updating Plans

Understand that Master Planning is a continuous process that involves periodic reevaluation throughout the life of the project.

PLANNING DIVISION

Urban Studies Branch

Objective:

To become familiar with the Corps of Engineers' plan formulation process and some insight to the urban studies workload.

	Subject Matter Coverage	Abilities to be Acquired
		At the end of this segment the intern will be able to:
1.	Plan Formulation	Better understand Corps of Engineers' plan formulation procedures.
2.	Urban Studies	Have an appreciation for the Urban Studies current and future workload.

DISPOSITIO		APPENDIX C		
FERENCE OR OFFICE SYMBOL	SUBJECT			
LMS	Engineering Int	ern Training Ag	reement	
TO LMSPO	FROM LMS	DATE	XX XXX XX XXXXXX/3-XXXX/XX	CMT'1
This is to assure you that the engineer interns as constantistic satisfactory complete the transition, occupational serie training program and propose	tained in raining program as a es and grade; therefo	includ condition of my ore, I hereby ag	ing the requireme continued employ ree to the terms	ent that I ment in my
		SIGNATURE		
		SERIES AND GRA	DE	

APPENDIX D

Instructions for Performance Appraisals for Career Interns

The following special instructions apply to <u>DA Civilian Career Program Interns</u>. All career interns will be appraised according to these instructions. <u>Job Performance Planning Worksheets</u>, DA Form 4968, and <u>Employee Performancae Appraisals</u>, DA 4969, will be used to document these appraisals.

a. Performance Standards.

- (1) All interns will be judged against the performance standards specified on the DA Form 4968. Supervisors may use the standards which are appropriate for the particular position, title, and grade, but they must, as a minimum, rate the intern against the following eight major elements:
 - (a) Quality of Work
 - (b) Quantity of Work
 - (c) Dependability
 - (d) Interpersonal Relations
 - (e) Written Communications
 - (f) Oral Communications
 - (g) Problem Solving
 - (h) Initiative
- (2) The supervisor of the organization to which the intern is permanently assigned will complete a DA Form 4968 and give it to the intern upon entrance on duty. The supervisor will advise the intern that he/she will be given an interim rating on these standards after each of his/her rotational assignments (if rotation is part of the training plan), and a semiannual appraisal until he/she completes the intern program.
- b. Rating Period. The rating periods will be every six months starting at the intern's entrance on duty date. In other words the intern will have two semiannual appraisals per year instead of one annual appraisal. Use DA Form 4969 (Employee Performance Appraisal) typing "Semiannual Intern Appraisal" in block 5. Part III of DA Form 4969 need only be completed to document changes which occur to the Individual Development Plan (IDP).

- c. Rating Supervisor, Reviewer, and Approving Official. The rating supervisor is the intern's immediate supervisor in the organization where he/she is permanently assigned. The Activity Career Program Manager (ACPM) is the approving official. The reviewer is the second level supervisor in the organization where he/she is permanently assigned.
- d. <u>Probationary Ratings</u>. Since interns are rated on a semiannual basis, the requirement for probationary appraisals in AR 690-400, Chapter 430, paragraph 3--2c(2) is waived.

e. Interim Appraisals.

- (1) The supervisor in each rotational assignment of the intern's Master Intern Training Plan and Individual Development Plan will:
 - (a) Complete and intern appraisal at completion of the assignment.
 - (b) Give the intern a copy.
 - (c) Send his/her permanent supervisor a copy.
 - (d) Send the Chief, Training and Development Branch, a copy.
- (2) The 12-day minimum time required by AR 690-400, Chapter 430, paragraph 3-2 c(1)(a), for interim appraisals is waived. Add a footnote to block 15a, DA Form 4969, and type on the bottom of the form stating, "The rating supervisor's signature certifies that training has been provided in accordance with the intern's IDP." At the end of the semiannual rating period, the intern's permanent supervisor will complete and certify the appraisal using the interim appraisals as supporting documentation.
- f. Semiannual Performance Appraisals. The intern's immediate supervisor in the organization to which he/she is permanently assigned will complete a DA Form 4969 every 6 months beginning with the intern's entrance on duty and ending when the intern completes the intern program. The supervisor will base the appraisal on his/her personal knowledge of the intern and the interim appraisals which have been done during the intern's rotational assignments. These appraisals are due in the Personnel Office not later than 45 days after the end of each 6-month appraisal period.
- g. Reduction-in-Force Credit. Interns with current semiannual ratings of Exceptional will have four years added to creditable service for reduction-in-force purposes. Two years will be added for Highly Successful ratings.*

OCT-01-1999 09:58 US ARMY CORPS OF ENG. STL 314 331 8677 P.36/42 c. EMPLOYEE! b. REVIEWER A RATING SUPERVISOR 8. RATIONALE FOR CHANGES MADE 7. MAJOR JOB ELEMENTS (Including critical elements and performance standards) CHANGED DURING RATING PERIOD "idicates that a copy of the worksheet has been provided and that the major eleviment. SIGNATURES PART III - CHANGES TO PERFORMANCE REQUIREMENTS PART IV - AUTHENTICATION (Intern) (Second Level Supervisor) (Immediate Supervisor) NAME, GRADE (If military), TITLE, & ORGANIZATION ical elements, and performance standards have been discussed with him or h \$\psi\$ GPO : 1981 0 - 341-646 (8269) DATE

OCT-01-1999 09:59 US ARMY CORPS OF ENG. STL 314 331 8677 P.37/42 8. 3. NAME (Last, First, MI) AND SSN 1. POSITION TITLE, PAY PLAN, SERIES, GRADE, AND JOB DESCRIPTION NO. A. MAJOR JOB ELEMENTS APR 81 4968-Problem Solving Initiative CRITICAL No Yes JOB PERFORMANCE PLANNING WORKSHEE: For use of this form, see AR 680-400, Chapter 430; th SUPPORTING TASKS PART II - PERFORMANCE REQUIREMENTS (Continued) PART I - ADMINISTRATIVE DATA 4. RATING PERIOD FROM: IT II CONTINUATION nent agency is DCSPER. self-starter, self reliant, resourceful. systematically 90% of the time. Was a detail. made decisions on sound analytical reasoning and careful weighing of alternatives 90% of the time. in planning and performing work. Set goals Effectively manages time and gives attention to 7. Effectively defined and analyzed problems and Effectively developed new ideas and approaches d. PERFORMANCE STANDARDS THRU: OF BAGES

OCT-01-1999 09:59 US ARMY CORPS OF ENG. STL 314 331 8677 P.38/42 4. MAJOR JOB ELEMENTS CRITICAL e. SUPPORTING TASKS PART II - PERFORMANCE REQUIREMENTS (Continued) ì d. PERFORMANCE STANDARDS * GPO : 1981 0 - 341-_.. (8270)

SAMPLE B - CAREER INTERN INTERIM APPRAISAL

	ED TYES INO	CONTINUIATION ATTACH	FORM 4969-1 (EMPLOYER PERFORMANCE APPRAISAL - PART II CONTINUIATION) ATTACHED	Z PRRFOI	DA FORM 4969-1 (EMPLOYE	7
		rative and effective g along with others. accepts authorized instructions.	Was cooperative and effective in getting along with others. Willingly accepts authorized orders and instructions.	No	interpersonal Relations	*
		when needed 90% Has been regular punctuality, l adaptability. srform under ner adverse Adhered to pre- y and health standards.	Was available when needed of the time. Has been re in attendance, punctualit stability, and adaptabili Was able to perform under stress and other adverse conditions. Adhered to pscribed safety and health policies and standards.	Y e	Dependability	Ņ.
Met" for each job element.		able amount rk on a f the time.	Produced an acceptable amount of satisfactory work on a timely basis 90% of the time.	No	Quantity of Work	N
Indicate "Met," "Exceeded"	(Show results based on performance during rotational training assign-ment)	thorough- eness in . Demon- of the of the	Exhibited accuracy, thon ness, and effectiveness completion of work. Den strated a knowledge of the jobs assignments.	Yes	Quality of Work	<u>نــر</u>
e. ELEMENT	d. RESULTS ACHIEVED	STANDARDS	c. PERFORMANCE STANDARDS	. CRITICAL	& MAJOR JOB ELEMENT	7
	TS SUMMARY	PART II - MAJOR ELEMENTS SUMMARY				
-	☐ SEPARATION FROM POSITION IS RECOMMENDED (See attached SF 52)	□ sepA	SPECIAL	VARY	☐ PROBATIONARY	
	☐ RETENTION IN POSITION IS RECOMMENDED.	☐ RETENTION IN	ERIM	KINTERIM	ANNUAL	
pervisors	IOD RECOMMENDATION (For probationary employees, including new supervisors	6. PROBATIONARY PERIOD RECOMMEN			TYPE OF APPRAISAL	Ø →
			3 ACTIVITY	MPLOYING	4. NAME AND LOCATION OF EMPLOYING ACTIVITY	z
		NO.	3. POSITION TITLE, PAY PLAN, SERIES, GRADE, AND JOB DESCRIPTION NO.	SERIES, G	OSITION TITLE, PAY PLAN,	3. P
	2. RATING PERIOD Period of Rotational Assignment FROM:	2. RATI FROM:		Ž;	NAME (Last, First, MI) AND SSN	 Z
	FRATIVE DATA	۔ چ				
PAGES	NISAL PAGE NO!	•	EMPLOYEE PERFORMANCE For use of this form, see AR 690-400, Chapter 430	70		
-						

FORM 4969

REPLACES DA FORM 1052, 1 MAY 69, WHICH IS OBSOLETE.

	In a rating supervisor's signature certifies that the overall performance has been discussed with the employee. 2 The employee's signature dose not necessarily indicate agreement with the appraisal or rating.	In a rating supervisor's signature certifies that the 2The employee's signature does not necessary
	(Intern)	d. EMPLOYEE ² (Int
	t Required)	c. APPROVING OFFICIAL (Not
	t Required)	b. REVIEWER (Not
	(Supervisor in rotational assignment)	a hating supervisor ¹ (Suj
DATE	NAME, GRADE (If military), TITLE & ORGANIZATION	15. SIGNATURES
	PART VI - AUTHENTICATION	
	mance and your jointly planned IDP)	14. EMPLOYEE COMMENTS (Provide comments on your supervisor's appraisal of your performance and your jointly planned IDP)
	PART V - EMPLOYEE COMMENTS	
UNSATISFACTORY	FUL FULLY SUCCESSFUL MARGINAL	RATING EXCEPTIONAL HIGH
	RMANCE LEVEL	
	tion in completed idp to cpo, attn: t&d br	NOTE: PROMPTLY FORWARD INFORMATION IN COMPLETED IDP
	12. SELF-DEVELOPMENT ACTIVITIES	11. DEVELOPMENTAL ASSIGNMENTS
		changes nec
		plete P
	FORMAL TRAINING NEEDED OR RECOMMENDED	PART III - INDIVIDE 9. S NEVIOUS PLAN (Explain extent to which previous IDP was accomplished)

1					
		T)	EMPLOYEE PERFORMANCE APPRAISAL		PAGE NO. PAGES
			PART I - ADA	(RATIVE DATA	** -
-4	1. NAME (Last, Flat, HI) AND SSN	Ž		2. RATING PERIOD THRU:	
ان	POSITION TITLE, PAY PLAN,	SERIES, G	3. POSITION TITLE, PAY PLAN, SERIES, GRADE, AND JOB DESCRIPTION NO.		
			PART II - MAJOR ELEMENTS SUMMARY (Co	NT8 SUMMARY (Continued)	
7.	A MAJOR JOB ELEMENT	N. GRITICAL	c. PERFORM	d. ACTUAL RESULTS ACHIEVED	ELEMENT . RATING
<u>)</u>			Willingly assisted co-workers in the interest of mission accomplishment. No more than 3 substantiated adverse comments were received.	.+ .	
	5. Written Communication	Yes	Effectively presented ideas in a clear, balancaed, and convincing manner. Used proper format/methods 90% of the time.	· de m	
	6. Oral Communication	Yes	Effectively expressed ideas in a clear, concise, and convincing manner in telephonic communications and face-to-face meetings 90% of the time. Effectively listened and considered others' viewpoints.	0%	
	7. Problem Solving	No	Effectively defined and analyzed problems and made decisions on sound analytical reasoning and careful weighing of alternatives 90% of the time. Effectively managed time and gave attention to detail.	(д.	
	8. Initiative	Yes	Effectively developed new ideas and approaches in planning and performing work. Set goals systematically 90% of the time. Was a self-starter, self-reliant, and resourceful.	.	
	DA APR 81 4969-1				

US ARMY CORPS OF ENG. STL

314 331 8677

P.42/42

OCT-01-1999

09:59